Ms. Heather N. Frosch Midwestern Gas Transmission P.O. Box 2511 Houston, Texas 77252-2511

Re: **125-11685** 

First Significant Permit Modification to Part 70 No.: T 125-5976-00004

Dear Ms. Frosch:

Midwestern Gas Transmission was issued a permit on December 31, 1998, for a stationary pipeline compressor station. A letter requesting changes to this permit was received on December 22, 1999. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This modification consists of:

- (a) Revising the testing condition for the emergency turbine to remove the requirement to test for SO<sub>2</sub> every five (5) years since the SO<sub>2</sub> standards are met by limiting the fuel sulfur content to 0.8% by weight. The source is required to monitor the fuel per a custom monitoring plan. This modification does not remove the source's initial testing requirement to stack test for SO<sub>2</sub>.
- (b) Redrafting the portable emergency turbine D section to account for an alternative operating scenario. The portable emergency turbine that is listed in Part 70 Permit T125-5976-00004 is the same emergency turbine that is listed in Part 70 Permit T153-5975-00006. Therefore, an alternative operating scenario has been drafted in order to account for the use of the portable emergency turbine at either of these source locations.
- (c) Addition of general construction conditions applicable to the portable emergency turbine because they were omitted from the original Part 70 Permit.

Changes to the Part 70 Permit are as follows (Deleted language appears as strikeouts and the new language is **bolded**.):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(d) One (1) natural gas fueled simple cycle turbine, identified as the **portable** emergency turbine, with a maximum capacity of 5500 Horsepower **to be used at this source as needed**.

#### SECTION D.4

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)] - Alternative Operating Scenario

(1) One (1) natural gas fueled simple cycle turbine, identified as the **portable** emergency turbine, with a maximum capacity of 5500 Horsepower **to be used at this source as needed.** 

#### **Construction Conditions**

#### **General Construction Conditions**

D.4.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### **Effective Date of the Permit**

- D.4.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.4.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2.

#### D.4.36 SO2 Emission Limitations

Pursuant to New Source Performance Standard, 326 IAC 12, 40 CFR 60.330, Subpart GG, this facilities shall not exceed a fuel sulfur limitation of 0.8% sulfur by weight or an SO2 emission rate of 0.015 percent by volume at 15 percent oxygen.

The Permittee will be complying with the SO<sub>2</sub> standard by limiting the fuel sulfur content to 0.8% by weight.

#### D.4.8 Operation of the Emergency Turbine

The portable emergency turbine shall only be used in Indiana at the sources located at (a) State Road 56 East, Cato, Indiana 47598, and (b) Beltway 41 South, Sullivan, Indiana 47882.

D.4. 5 9Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 2 and 6 months after issuance of this permit Within 60 days of the turbine being operated in Indiana at either location listed in Condition D.4.8, the Permittee shall perform testing utilizing Method 6 (40 CFR 60, Appendix A) for SO<sub>2</sub> and Method 7 (40 CFR 51, Appendix A) for NOx, or other methods as approved by the Commissioner. An initial IDEM approved stack test for NO<sub>x</sub> and SO<sub>2</sub> must be completed pursuant to 40 CFR 60, Subpart GG. Thise test for NO<sub>x</sub> shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.4.610 New Source Performance Standard, [326 IAC 12, 40 CFR 60.330, Subpart GG]

As required by 40 CFR 60.334(b)(2), the sulfur content and nitrogen content of the fuel being fired shall be recorded daily or on a custom fuel monitoring schedule approved by the administrator.

Midwestern Gas Transmission Cato, Indiana Permit Reviewer: Autumn M. Marker

#### D.4.**711** Record Keeping Requirements

- (a) To document compliance with Condition D.4.7, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken daily and shall be complete and sufficient to establish compliance with the NOx emission limit established in Condition D.4.5 and/or the SO2 emission limits established in Condition D.4.6.
  - (1) A log of the dates and hours of use.
- (b) Pursuant to 326 IAC 2-7-5(9)(A) and Condition D.4.8, the Permittee shall make a record in a log at the permitted facility of the alternative scenario under which it is operating upon making the change at the source. A summary of these records shall be included in the annual compliance certification submitted under 326 IAC 2-7-6(5).
- (bc) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Autumn Marker, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Autumn Marker or extension (3-0242), or dial (317) 233-0242.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

#### Attachments AMM

cc: File - Pike County

U.S. EPA, Region V

Pike County Health Department Southwest Regional Office

Air Compliance Section Inspector - Gene Kelso Compliance Data Section - Karen Nowak

Administrative and Development - Janet Mobley Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

### Midwestern Gas Transmission Company State Road 56 East Cato, IN 47598

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T125-5976-00004	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: December 31, 1998
First Significant Permit Modification No.: 125-11685-00004	Affected Pages: 5, 28, and 29

Issuance Date:

Issued by: Paul Dubenetzky, Branch Chief Office of Air Management First Significant Permit Modification 125-11685 Permit Reviewer: Autumn M. Marker Page 5 of 34

OP No. T125-5976-00004

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary pipeline compressor station.

Responsible Official: Mr. Dan Martin

Source Address: State Road 56 East, Cato, IN 47598

Mailing Address: 1001 Louisiana Street, P.O. Box 2511, Houston, TX 77252-2511

SIC Code: 4922 County Location: Pike

County Status: Attainment or unclassifiable for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) natural gas fueled reciprocating internal combustion internal engine compressors, installed in 1961, identified as ID #'s 1-A through 3-A, with a maximum capacity of 2700 Horsepower each, and exhausting to stacks # 1-ENG-1A through 3-ENG-3A.
- (b) One (1) natural gas fueled turbine powered compressor, installed in 1979, identified as ID # 1-B, with a maximum capacity of1100 Horsepower, and exhausting to stack # 4-CT-1B.
- (c) One (1) natural gas fueled turbine powered compressor, installed in 1980, identified as ID # 1-C, with a maximum capacity of 3540 Horsepower, and exhausting to stack # 5-CT-1C.
- (d) One (1) natural gas fueled simple cycle turbine, identified as the portable emergency turbine, with a maximum capacity of 5500 Horsepower to be used at this source as needed.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, including a boiler identified as ID #1E.

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

Midwestern Gas Transmission Company Cato, Indiana Permit Reviewer: W.E.McPhail

#### **SECTION D.4**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)] - Alternative Operating Scenario

(1) One (1) natural gas fueled simple cycle turbine, identified as the portable emergency turbine, with a maximum capacity of 5500 Horsepower to be used at this source when needed.

#### **Construction Conditions**

#### **General Construction Conditions**

D.4.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### **Effective Date of the Permit**

- D.4.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.4.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.4 General Operation

Any change or modification which may increase potential emissions from the equipment covered in this permit shall obtain prior approval from the Office of Air Management (OAM).

#### D.4.5 NOx Emission Limitations

Pursuant to New Source Performance Standard, 326 IAC 12, 40 CFR 60.330, Subpart GG, NOx emissions shall not exceed 178 ppm at 15% O<sub>2</sub>.

#### D.4.6 SO2 Emission Limitations

Pursuant to New Source Performance Standard, 326 IAC 12, 40 CFR 60.330, Subpart GG, this facilities shall not exceed a fuel sulfur limitation of 0.8% sulfur by weight or an SO2 emission rate of 0.015 percent by volume at 15 percent oxygen.

The Permittee will be complying with the SO<sub>2</sub> standard by limiting the fuel sulfur content to 0.8% by weight.

#### D.4.7 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The operation of the emergency turbine shall be limited to 40 days (1080 hours) or less. This usage limit is required to limit the potential to emit of NOx to less than 14.4 tons per 365 consecutive day period. This operation limitation is consistent with the definition of emergency generators as contained in a guidance memorandum from U.S.EPA dated September 6, 1995. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### D.4.8 Operation of the Emergency Turbine

The portable emergency turbine shall only be used in Indiana at the sources located at (a) State Road 56 East, Cato, Indiana 47598, and (b) Beltway 41 South, Sullivan, Indiana 47882.

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OP No. T125-5976-00004

Permit Reviewer: W.E.McPhail

#### **Compliance Determination Requirements**

#### D.4.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 60 days of the turbine being operated in Indiana at either location listed in Condition D.4.8, the Permittee shall perform testing utilizing Method 6 (40 CFR 60, Appendix A) for  $SO_2$  and Method 7 (40 CFR 51, Appendix A) for NOx, or other methods as approved by the Commissioner. An initial IDEM approved stack test for  $NO_x$  and  $SO_2$  must be completed pursuant to 40 CFR 60, Subpart GG. The test for  $NO_x$  shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.4.10 New Source Performance Standard [ 326 IAC 12, 40 CFR 60.330, Subpart GG]

As required by 40 CFR 60.334(b)(2), the sulfur content and nitrogen content of the fuel being fired shall be recorded daily or on a custom fuel monitoring schedule approved by the administrator.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]]

#### D.4.11 Record Keeping Requirements

- (a) To document compliance with Condition D.4.7, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken daily and shall be complete and sufficient to establish compliance with the NOx emission limit established in Condition D.4.5 and/or the SO2 emission limits established in Condition D.4.6.
  - (1) A log of the dates and hours of use.
- (b) Pursuant to 326 IAC 2-7-5(9)(A) and Condition D.4.8, the Permittee shall make a record in a log at the permitted facility of the alternative scenario under which it is operating upon making the change at the source. A summary of these records shall be included in the annual compliance certification submitted under 326 IAC 2-7-6(5).
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.4.12 Reporting Requirements

Pursuant to New Source Performance Standard, 326 IAC 12, 40 CFR 60.330, Subpart GG, the natural gas delivered to the station shall be monitored on a periodic basis. An annual summary of the information to document compliance with Subpart GG. shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the period being reported.

## Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Significant Permit Modification to a Part 70 Operating Permit

Source Name: Midwestern Gas Transmission

Source Location: State Road 56 East, Cato, Indiana 47598

County: Pike County

SIC Code: 4922

Operation Permit No.: T125-11685-00004 Permit Reviewer: Autumn M. Marker

On February 17, 2000, the Office of Air Management (OAM) had a notice published in the Press Dispatch, Petersburg, Indiana, stating that Midwestern Gas Transmission had applied for a permit modification to a Part 70 Operating Permit to revise the testing condition for the emergency turbine. The notice also stated that OAM proposed to issue a permit for this modification and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 7, 2000, the OAM received the following comments from the source on the draft permit modification. Bolded language has been added, the language with a line through it has been deleted.

#### Comment 1:

Section D.4.9 Testing Requirements - Midwestern Gas Transmission (MGT) requests that the initial stack test requirement for  $SO_2$  be deleted. Based on the approved Custom Fuel Monitoring Schedule, the maximum fuel sulfur content recorded is 0.205 grains per 100 standard cubic feet or 0.0006% weight. The value is more than one thousand times less than the fuel sulfur limitation. The calculated  $SO_2$  emission rate using this maximum value equates to 0.000014 percent by volume or 0.14ppmv, more than one thousand times less than the  $SO_2$  standard. The likelihood of violation of the standard is minimal and therefore MGT requests that the initial stack test requirement be eliminated.

#### Response 1:

The Permittee is required to do an initial stack test on the emergency turbine pursuant to 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines), specifically 60.333 and 60.335. The OAM has not required subsequent testing on the turbine, but only an initial test in line with the requirement of the New Source Performance Standard. The calculated estimated emissions shall be used for compliance monitoring purposes, however, an initial stack test is still required on the unit.

## Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

#### **Source Background and Description**

Source Name: Midwestern Gas Transmission Company
Source Location: State Road 56 East, Cato, Indiana 47598

County: Pike County

SIC Code: 4922

Operation Permit No.: T125-5976-00004
Operation Permit Issuance Date: December 31, 1998
Significant Permit Modification No.: T 125-11685-00004
Permit Reviewer: Autumn M. Marker

The Office of Air Management (OAM) has reviewed a modification application from Midwestern Gas Transmissions Company relating to the operation of a stationary pipeline compressor station.

#### **History**

On December 22, 1999, Midwestern Gas Transmission Company submitted an application to the OAM requesting to remove the testing condition on the portable emergency turbine rated at 5500 Horsepower from their Part 70 Permit No. T125-5976-00004. Midwestern Gas Transmission Company was issued a Part 70 permit on December 31, 1998.

Upon review of the source's application for changes to the Part 70 Permit, it was discovered that the same piece of equipment (portable emergency turbine) had been permitted at two (2) Midwestern Gas Transmission Company plants in Indiana located at: (a) State Road 56 East, Cato, Indiana 47598, and (b) Beltway 41 South, Sullivan, Indiana 47882. To correctly reflect this, an alternative operating scenario has been established in order to allow the same emergency turbine to be used at either Midwestern Gas Transmission Company location. The PSD limit has been applied independently to both sources. Records of when and for how long the turbine is used at each location are required.

It was also discovered that the source was required to stack test for  $SO_2$  when the source chose to comply by limiting the fuel sulfur content to 0.8% by weight. The source is required to do an initial test for  $SO_2$  pursuant to 40 CFR 60, Subpart GG. The requirement to test for  $SO_2$  every five (5) years has been removed from the Part 70 Permit because when the turbine is in use the source is required to monitor sulfur content according to their custom monitoring plan. The requirement to test for  $NO_x$  has not been removed from the Part 70 Permit because the source is required to perform an initial stack test in accordance with 40 CFR 60, Subpart GG, on the emergency turbine upon use in Indiana. The source must perform an IDEM approved stack test on the turbine. The stack test results that were originally submitted were not performed by the source and the stack test was not approved by IDEM. The requirement to test for  $NO_x$  every five (5) years has not been removed from the permit because this is the method that is used to determine compliance with the 178 ppm  $NO_x$  limit.

Permit Reviewer: Autumn M. Marker

#### **Existing Approvals**

The source was issued a Part 70 Operating Permit T125-5976-00004 on December 31, 1998. The source has since received no further approvals.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 22, 1999. Additional information was received on January 12, 2000, and January 13, 2000.

This application has been reviewed as a Significant Permit Modification because the testing condition for SO<sub>2</sub> is being relaxed and the D section for the portable emergency turbine has been revised.

#### **County Attainment Status**

The source is located in Pike County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	attainment
СО	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Pike County has been designated as attainment or unclassifiable for ozone.

#### Conclusion

The operation of this stationary pipeline compressor station shall be subject to the conditions of the attached proposed **Significant Permit Modification No. T125-11685-00004**.